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Le but de cette recherche était d'évaluer l'habileté de communication en français et le rendement scolaire d'élèves provenant de différentes communautés ethniques et intégrés au secteur français de la CEPGM. Quatre groupes d'élèves de 2e année ont pris part à cette étude. Les élèves du premier groupe avaient des compagnons de classe francophones, alors que les élèves du deuxième groupe n'en avaient pas. Le troisième groupe était d'origine haïtienne et parlait français et créole à la maison. Le quatrième groupe était composé de francophones unilingues. Les résultats indiquent que le rendement scolaire des élèves de diverses origines ethniques est comparable à celui des francophones. D'autre part, l'habileté de communication en français des élèves non francophones est plus faible surtout en ce qui a trait à l'expression orale.

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INTEGRATING INTO THE FRENCH SECTOR: AN ASSESSMENT OF LINGUISTIC AND ACADEMIC ACHIEVEMENT OF GRADE 2 STUDENTS FROM DIFFERENT ETHNIC BACKGROUNDS

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Résumé

Le but de cette recherche était d'évaluer l'habilité linguistique et le rendement académique d'élèves provenant de différentes communautés ethniques. Quatre groupes d'élèves de 2e année ont pris part à cette étude. Tous ces élèves étudiaient dans des écoles françaises. Deux des groupes ne parlaient pas français à la maison. Les élèves du premier groupe étaient intégrés à un groupe de francophones (groupe INT) et ceux du deuxième groupe ne l'étaient pas (groupe NINT). Le troisième groupe se composait d'élèves d'origine haïtienne (groupe HAI) qui parlaient français et créole à la maison. Le quatrième groupe se composait d'élèves francophones unilingues. Ce groupe était le groupe témoin (groupe FC).

L'habilité linguistique en français et en anglais a été envaluée à l'aide des tests suivants: (1) un test de lecture, un test de rendement et un test de production orale en français; (2) un test de compréhension auditive, un test de lecture et un test d'expression orale en anglais. En plus, on a administré un test de rendement en mathématiques.

Les résultats indiquent que: (1) Il n'y avait pas de différence significative entre les quatre groupes au test de rendement en mathématiques et il n'y avait qu'une différence minime au test de lecture. (2) Le groupe NINT a obtenu des résultats nettement inférieurs à ceux du groupe FC au test de rendement de français (total des points et trois des sous-tests) et à presque toutes les évaluations effectuées sur le test d'expression orale. (3) Le groupe NINT a obtenu des résultats nettement inférieurs à ceux du groupe INT au test de rendement de français (total des points et

deux sous-tests). Il n'y avait pas d'autres différences significatives entre ces deux groupes. (4) Le groupe HAI a obtenu des résultats équivalents et dans certains cas, supérieurs à ceux du groupe FC sauf à l'évaluation globale du test d'expression orale en français. (5) Le groupe FC a obtenu des résultats nettements inférieurs à ceux des groupes INT et NINT à tous les tests d'anglais.

Les résultats nous mènent à conclure que la performance des élèves de diverses origines ethniques est comparable à celle des francophones en ce qui concerne le rendement académique. D'autre part, l'habilité linguistique en français des élèves non francophones n'a pas encore atteint le niveau de compétence d'un locuteur natif, surtout en ce qui concerne l'expression orale.

Summary

The purpose of this study was to assess linguistic and academic achievement of grade 2 students from different ethnic backgrounds. Four groups of students participated in the study. All the students attended regular French language schools. Two of the groups did not speak French as one of their home languages. The students of the first group were integrated with a group of francophone students (IMT group) and the students in the second group had no francophone peers in the classroom (MIMT). The third group was a group of Haitian students (HAI group) who spoke creole and French at home. The fourth group was a control group of monolingual French speakers (FC group).

French language proficiency was measured by the following tests: a test de lecture, a test de rendement en français and a test d'expression orale. English language proficiency was measured by the following tests: a listening comprehension test, a reading comprehension test and an oral production test. A test de rendement en mathématiques was administered to assess achievement in mathematics.

The results indicate that: (1) There were no significant differences among the groups on the test de rendement en mathématiques and only marginally significant differences on the test de lecture. (2) The performance of the MIMT group was significantly lower than that of the FC groups on the test de rendement en français (total score and three subtests) and on practically all measures pertaining to the evaluation of the test d'expression orale. (3) The performance of the MIMT group was not

significantly lower than that of the INT group except on the test de rendement en français (total score and two subtests). (4) The performance of the HAI group was as good as, or better than, that of FC group on all measures of evaluation except the global evaluation of the oral production test. (5) The performance of the FC group was significantly lower than that of the INT and NINT groups on all measures of English proficiency.

The results lead to the conclusion that the students from different ethnic origines demonstrate parity with their franconnone peers in terms of academic achievement but the non-francophone students have not yet reached native like competence in French language skills, particularly in oral discourse.

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There are presently many students in the French sector of the Protestant School Board of Greater Montreal (P.S.B.G.M.) whose mother tongue is not French. These students come from different ethnic backgrounds and most of them attend a classe d'accueil program before joining the regular French program. This program is an intensive French language program designed to prepare non-francophone students to intergrate into regular French language schools. After 10 months in the program, students are transferred to the regular French program at the appropriate grade level. During their first year in the latter program, the non-native students still receive additional instruction in French (post-accueil courses). However, from the second year onwards these students are expected to be sufficiently proficient in the French language to follow the program without difficulty.

Previous evaluations of accueil students in kindergarten (Adiv, Notes 1 and 2) revealed that at the end of the one-year program, the accueil students performed as well as a group of francophone controls on comprehension tasks. However, they differed significantly from the native speakers on all aspects of oral production. A follow-up study of the first group of accueil students carried out the following year (Adiv Note 3) revealed similar results at the end of grade 1. Thus, in terms of linguistic proficiency the post-accueil students had not yet caught up to native peers at the end of their first year in the regular French program.

The present study was undertaken to assess French language pro-

ficiency and academic achievement of students from different ethnic backgrounds at the end of grade 2, i.e., after the majority of those students who had previously attended an accueil class were completing their second year in the regular French program. Furthermore, since second languages are taught from kindergarten onwards in the P.S.B.G.M.'s schools, it was decided to assess the students' skills in English as a second language (ESL). Testing in English was, however, deferred until the end of grade 3 because it was felt that the students' ESL reading skills were not sufficiently developed at the end of grade 2.

Method

The Subjects

One hundred sixteen students participated in this study. Ninety-one students were of different ethnic backgrounds, the majority (67%) being of Greek origin. Seventy two of these students had attended an accueil program in kindergarten and four of them had only started the accueil program in grade 1. Of the remaining students fifteen were of Haitian origin. All of these students spoke creole and French at home and only four of them had attended an accueil class. The remaining twenty-five students were unilingual francophones.

The students attended six different schools. In the grade 2 classes of three of the schools there were no francophone students at all and all the students in these classes had previously attended an accueil program. In the other three schools, students who had previously

attended an accueil program were integrated with francophone students in the same classroom.

The one hundred sixteen students were divided into four groups in the following manner. First, a distinction was made between students who were in an integrated French class (hereafter INT group) and students who had no contact with native peers in the classroom (hereafter NINT group). The third group was made up of the Haitian students (hereafter HAI group) and the fourth group consisted of monolingual francophone students (hereafter FC group). The exact sample sizes of the different groups are summarized in Table 1A and the names of the participating schools are shown in Table 1B. It should be noted that the students in the FC group were not completely monolingual, since they had been exposed to English from kindergarten onwards. They were,however,considered monolingual since English was not a language of origin for any of them.

All the students were of middle to lower middle socio-economic class homes except in one school where the income bracket of the parents ranged from middle to upper-middle socio-economic levels.

In order to ensure that differences among the groups did not arise because of possible differences in mental capacities, the students were administered the Coloured Progressive Matrices Test (revised order, Raven,1956).

The Tests

Three batteries of tests were administered: (1) a set of French language tests, (2) a mathematics test and (3) a set of English language tests.

(I) The French Tests

The following French language tests were administered (i) a reading test (test de lecture), (ii) a test de rendement en français and (iii) an oral production test (test d'expression orale).

(i) Test de lecture.

This test was developed by the Research Department of the P.S.B.G.M. for the present evaluation. It consists of six stories of varying length (45-105 words). Each story is followed by several questions with multiple-choice answers (20 questions in all). Except for the example given at the beginning of the test, the students read all the stories and the multiple-choice answers on their own.

(ii) Test de rendement en français

This test was developed and standardized by the Catholic School Commission of Montreal (C.E.C.M.) for use in its schools. A different form is used at each grade level (grade 1-grade 9). The form administered in the present study was the test de rendement en français no 2. It consists of eight sub-tests and assesses various language arts skills in the areas of spelling, vocabulary, sentence interpretation and grammar. In all, the test contains 35 items. Except for five items pertaining to the spelling of words, all the items are multiple-choice items. The stimulus items were presented orally and in written form. The multiple-choice answers were only presented in writing.

(iii) Test d'expression orale

This test was developed by the Research Department of the P.S.B.G.M.

It consists of three sets of pictures. Each set contains several pictures which make up a story. The students were asked to narrate what they saw in the pictures. If a student did not complete the story, he or she was urged on by questions such as "et qu'est-ce qui se passe ici?" (and what is happening here?).

To assess the students' proficiency in oral production two different measures of evaluation were used. First, each student's speech sample was evaluated by two raters, working independently, on four different dimensions: pronunciation, grammar, vocabulary and communication. The ratings ranged from a maximum of 5, indicating native-like skill, to a minimum of 1, indicating very poor skill. The evaluations of both raters were combined to form and average score for each dimension. Second, a more objective evaluation of the quantitative performance of the students' speech samples was provided by counting the number of T-units and the percentage of correct T-units produced by each student . A T-unit has been defined as "a main clause plus all subordinate clauses and non-clausal structures attached to or embedded in it" (Hunt, 1970:4). The T-unit has been suggested as a measure of second language development (Larsen-Freeman and Strom 1977) and has been used to assess oral and written speech samples of second language learners (Scott and Tucker 1974).

(2) The Mathematics Test

The mathematics test used in the present study was the test de rendement en mathématiques no 2. This test, like the test de rendement en français, was developed and standardized by the Catholic School Com-

mission of Montreal (C.E.C.M.) for use in its schools. It consists of 35 multiple-choice items. These items assess different mathematics skills such as numeration, problem solving and recognition of basic geometric shapes.

(3) The English Language Tests

The following English language tests were administered: (i) a listening comprehension test, (ii) a reading comprehension test and (iii) an oral production test.

(i) The Listening Comprehension Test

This test was developed by the P.S.B.G.M. for the present evaluation. It consists of four parts. In Part I the students had to select, from among four pictures, the one that corresponds to an orally presented sentence. In Part II the students had to select one of four possible answers to an orally presented question. The answers were presented both orally and in writing. In Part III the students heard a statement or a short story followed by one or several questions. For each question the students had to select one of four possible answers presented in oral and written form. Part IV differs from Part III only in that the stories are slightly longer. Furthermore, each story in Part IV is followed by several questions. In all the test comprises 30 items divided as follows: nine in Part I, ten in Part II, seven in Part III and four in Part IV.

(ii) The Reading Comprehension Test

This test was adapted from a grade 3 test prepared by the English

as a Second Language Department of the P.S.B.G.M. It consists of 30 multiple-choice items. In each case the learner has either to answer a question or complete a statement. Seven of the items are short stories. The stories are intersperced between the single sentence statements. The multiple-choice answers consist either of a single word or a short expression. The answers to the last item consist of four short sentences. Except for two examples which the tester read together with the students, the students read all the stimulus sentences and all the multiple-choice answers on their own.

(iii) The Oral Production Test

This test was developed by the research department of the P.S.B.G.M. It contains six sets of pictures. Sets 1-3 consist of a single picture. For each picture a single question was asked. Sets 4,5 and 6 consist of several pictures. The pictures in each of these sets conveys a story which was elicited through a number of questions. In all,each student was asked 25 questions. All the questions were asked in English.

To assess the students' proficiency in oral production, two different measures of evaluation were used. First, the responses given to each question were scored as either correct or incorrect. Incorrect responses were classified as either (1) grammatically incorrect, (2) semantically incorrect or (3) insufficient.This last category included responses given in the mother tongue. Second, each student's speech sample was evaluated by two raters, working independently, on four different dimensions: pronunciation, grammar, vocabulary and communication. The ratings ranged from a maximum of 5, indicating native-like skill,

to a minimum of 1, indicating very poor skill. A value of 0 was given in cases where no production was elicited or where production was so minimal that it could not be evaluated. The evaluations of both raters were combined to form an average score for each dimension.

Procedure for Administering the Tests

All the tests, except the two oral production tests, were group administered to intact grade 2 classes. The oral production tests were administered individually. Each testing session lasted 8-10 minutes and the entire session was tape recorded. Because the individual testing sessions tended, at times, to interfere with classroom routines not all the students were administered these tests.

The French tests were administered entirely in French. The English tests were given in English,except for the initial instruction which were given in French.

All the tests were administered at the end of the school year. However, as noted above, there was a one-year span between the French tests and the English tests. The French tests were administered at the end of grade 2 and the English tests at the end of grade 3. As a number of students had moved over the one-year period and could not be traced in the P.S.B.G.M., the number of students tested in English was smaller than those tested in French (for exact sample sizes see Table 2). In the case of the HAI group, the number of students was very small and this group was, therefore, excluded from the English tests.

Results

The students' scores on the Coloured Progressive Matrices test were analyzed first using a one-way analysis of variance procedure. The results of the analysis revealed that there were no statistically significant differences between the groups (see Table 3). Mental capacity was, therefore, not considered an influencing factor in the results of the language and mathematics tests. The data pertaining to the latter tests were analyzed using the same one way analysis of variance procedure as above. Separate analysis were carried out for each test and subtest. In addition, wherever significant differences were noted, a Newman Keuls procedure of multiple comparisons was used to determine which groups differed significantly from one another.

The results of all the analyses are summarized in Table 4 (French and mathematics results) and Table 5 (English test results). For the analysis of one of the subtests (percentage of correct T-units) the raw scores were converted using the $Y = 2 \arcsin\sqrt{x}$ transformation. Both the transformed scores and the corresponding percentages are shown in Table 4. The results obtained for each test are briefly described below.

The French Test Results

(i) Test de lecture

The results of the test de lecture show a marginally significant difference between the groups ($F = 4.14$, $p < .01$). In consequence, the Newman Keuls analysis was not significant. However, an informal comparison

of the groups shows that the NINT group ($\bar{X}$ = 10.13) scored numerically lower than the other groups (INT, $\bar{X}$ = 12.80; HAI, $\bar{X}$ = 12.93; FC, $\bar{X}$ = 12.64).

(ii) Test de rendement

On the test de rendement, there were significant differences among the groups on the total score and on the scores of four of the subtests.

The total score of the NINT group ($\bar{X}$ = 18.49) was significantly lower than those of the other groups. On the other hand, the HAI group ($\bar{X}$ = 27.33) scored significantly higher than the other three groups. There was no significant difference between the INT group ($\bar{X}$ = 23.92) and the FC group ($\bar{X}$ = 23.40) and both groups scored significantly higher than the NINT group.

On subtest I, which assessed spelling skills, the NINT group ($\bar{X}$ = 3.03) and the FC group ($\bar{X}$ = 2.96) scored significantly lower than the INT group ($\bar{X}$ = 4.00) and the HAI group ($\bar{X}$ = 4.40). There were no other significant differences.

On subtest II, which tested the students' knowledge of vocabulary, the NINT group ($\bar{X}$ = 3.97) scored significantly lower than the other groups and there was no significant difference among the latter three groups (INT,. $\bar{X}$ = 6.85; HAI, $\bar{X}$ = 6.67; FC, $\bar{X}$ = 7.36).

On subtests III and VIII, which were the only other subtests on which there were significant differences among the groups, the NINT group (subtest III, $\bar{X}$ = 1.21; subtest VIII, $\bar{X}$ = 2.10) scored significantly lower than the HAI group (subtest III, $\bar{X}$ = 2.60; subtest VIII, $\bar{X}$ = 4.07) and the FC group (subtest III, $\bar{X}$ = 1.88; subtest VIII, $\bar{X}$ = 3.00). Moreover, both the INT group and the FC group scored significantly lower than the

HAI group on these two subtests. It is noteworthy that there were no significant differences between the INT group and the NINT group on either subtest.

Test d'expression orale

The results of the global evaluation (ratings on pronunciation, grammar, vocabulary and communication) show significant differences among the groups. On three of the four measures (pronunciation, grammar and vocabulary) the NINT group and the INT group were rated significantly lower than the HAI group who, in turn, was rated significantly lower than the FC group. On the fifth measure (communication), the three groups of non-native speakers (NINT, INT and HAI) were again rated significantly lower than the FC group. However, here there was no significant difference between the HAI group and the other two groups (for exact rating values see Table 4).

The results of the T-unit analysis indicate no significant differences between the four groups in terms of the number of T-units produced. However, the NINT group ($\bar{X}$ = 6.59) as well as the INT group ($\bar{X}$ = 6.83) produced significantly shorter T-units than the HAI group ($\bar{X}$ = 7.62) and the FC group ($\bar{X}$ = 7.61). Moreover, the NINT group (58%) and the INT group (62%) produced proportionally fewer correct T-units than the HAI group (89%) and the FC group (87%). It is noteworthy that there were no significant differences between the HAI group and the FC group on the last two measures.

The Mathematics Test Results

There were no statistically significant differences among the groups on the test de rendement en mathématiques. In descending order, the numerical scores of the four groups were as follows: INT, $\bar{X}$ = 27.20; HAI, $\bar{X}$ = 24.93; FC, $\bar{X}$ = 23.60; NINT, $\bar{X}$ = 23.44.

The English Test Results

(i) Listening Comprehension Test

The results of the listening comprehension test show that the INT group ($\bar{X}$ = 28.00) and the NINT group ($\bar{X}$ = 28.91) scored significantly higher than the FC group ($\bar{X}$ = 22.18). There was no significant difference between the INT group and the NINT group on this test.

(ii) Reading Comprehension Test

The INT group ($\bar{X}$ = 25.27) and the NINT group ($\bar{X}$ = 27.36) scored again significantly higher than the FC group ($\bar{X}$ = 16.91). The difference between the INT group and the NINT group was not significant.

(iii) Oral Production Test

The item analysis reveals that the NINT group ($\bar{X}$ = 19.19) produced significantly more correct responses than the INT group ($\bar{X}$ = 14.22) and both of these groups produced significantly more correct responses than the FC-group ($\bar{X}$ = 6.70). A similar pattern was noted with respect to the number of incorrect semantic responses (NINT, $\bar{X}$ = 0.56; INT, $\bar{X}$ = 1.67; FC, $\bar{X}$ = 3.70). In the case of the incorrect semantic responses, these findings must, however, be accepted cautiously because of the low values noted here. There were no significant differences between

the three groups in the number of incorrect grammatical responses (NINT, $\bar{X}$ = 5.74; INT, $\bar{X}$ = 6.78; FC, $\bar{X}$ = 6.90).

Three major types of grammatical errors were produced by the NINT and INT groups;

(1) Incorrect use of a preposition, e.g.,

*The baby is at the bed.

The baby is in the bed.

(2) Incorrect negative particle placement with infinitives, e.g.,

*She told the cat to not go on the bed

(3) Incorrect tense

"Tester: What is the girl doing?

Student: *She kissed her mother.

Interestingly, the NINT and INT students made practically no errors in the present progressive and in other inflectional endings, whereas such patterns were frequently observed in the speech of the FC group. In a similar vein the FC students substituted the third person masculine pronouns for the corresponding feminine ones ("he" for "she", "his" for "her") more often than the NINT and INT students.

Finally , the item analysis reveals that there were more "insufficient" responses for the FC group ($\bar{X}$ = 8.90) than for the NINT group ($\bar{X}$ = 0.77) and for INT group ($\bar{X}$ = 2.00).

The analysis of the global evaluation results reveals a consistent pattern across the five dimensions (comprehension, pronunciation, grammar, vocabulary and communication). On each of these dimensions, the

FC group scored significantly lower than the NINT and INT groups. Among the latter two groups, there was no significant difference although the NINT group was rated numerically higher than the INT group.

Summary and Discussion

The findings of this study can be summarized as follows:

(1) There were no significant differences among the four groups on the test de rendement en mathématiques and only marginally significant differences on the test de lecture.

(2) The performance of the NINT group was significantly lower than that of the FC group on the test de rendement en français (total score and three subtests) and on practically all measures pertaining to the evaluation of the French oral production test.

(3) The performance of the NINT group was not significantly lower than of the INT group, except on the total score of the test de rendement en français and on two subtests of that test.

(4) The HAI group scored significantly higher than the FC group on the total score of the test de rendement en français and two subtests. However, the HAI group was rated significantly lower than the FC group on the global ratings pertaining to the evaluation of oral production.

(5) The performance of the FC group was significantly lower than that of the NINT and INT groups on all measures pertaining to the evaluation of English proficiency.

(6) The NINT group produced significantly more correct oral responses in English than the INT group and there were no other significant differences between these two groups on the English language tests.

The most noteworthy finding to emerge from this study is that the HAI group performed as well as, and in some cases better, than the FC [illegible] French tests. These findings seem to contradict the [illegible] problems in the classroom (Delean 1978). On the other hand, it is [illegible] performance in French was not as good as that of the FC [illegible] since, as noted above, the HAI students spoke some French at home. Closer examination of the results reveals that those findings pertain only to the global evaluation. Since this evaluation is subjective in nature, it is possible that the creole accent that often characterizes the speech of Haitians influenced to some extent the judges' ratings (see Tardif and d'Anglejan, 1981 for the effect of accent on the judgement of native speakers). This interpretation seems especially plausible in view of the fact that the HAI group's oral performance was not found to differ significantly from that of the FC group in terms of the more objective measures of evaluation such as mean lenght of a T-unit and the percentage of correct T-units.

With respect to the performance of the NINT and the INT groups, on the French tests, the findings of this study seem to indicate that the presence of native speakers has not had a significant influence on the development of oral proficiency of the second language learners. Again, these findings seem to contradict assumptions pertaining to the

importance of native peer models in the classroom (Selinker, Swain and Dumas, 1975). However, a previous study (Adiv, Note 2) has already shown that non-native students in integrated classes do not necessarily perform better on French language tests than non-native students in non-integrated classes. On the other hand, the INT group did perform significantly better than the NINT group on certain subtests of the test de rendement en français. Moreover, numerically there is a definite tendency for the INT group to score higher than the NINT group on almost all the tests. Thus differences between the INT group and the FC group are somewhat less pronounced than differences between the NINT group and FC group. One notable exception to this pattern is the finding that the performance of the INT group on subtest I of the test de rendement was significantly higher than that of both the NINT group and the FC group and there was no significant difference between the latter two groups. It must, however, be borne in mind that this test measured spelling skills. It is possible that the development of these skills does not depend heavily on a person's overall fluency in the language.

A look at the overall pattern of the English tests reveals that here the above-noted pattern is reversed, i.e., the NINT students tend to score higher than the INT students, although, again, there are only few significant differences. The finding that the FC students' performance was significantly lower than that of the two other groups is not surprising since the students in the FC group spoke only French at home, whereas the students in the NINT and INT groups often spoke English at home in addition to their language of origin. Moreover, except in the case of those FC students who were studying in a school located in the West

Island, the FC students lived in neighbourhoods which were predominantly French speaking. These students may, therefore, not have had the benefit of informal contact with English outside the classroom.

The lack of opportunity to use English outside the classroom may also explain, to some extent, certain differences in English proficiency between the INT group and the NINT group. French schools with an overwhelming majority of non-francophone students are more likely to be situated in English speaking neighbourhoods than schools with a considerable number of francophone students. Thus it is probable that students in the NINT group spoke English more frequently outside the school than students in the INT group.

In conclusion, the findings of this study suggest that after two years in a regular French program, the non-francophone students can handle academic subjects such as mathematics as well as native speakers. Moreover, they seem well on the way to achieving parity with their native peers on those linguistic skills which are developed within the school curriculum, especially those pertaining to reading comprehension. On the other hand, oral proficiency is still distinctly non-native like, a finding which may be attributed to these students' limited use of French outside the classroom (Adiv and Dorè, Note 4). It would be of interest to follow the linguistic development of these students throughout the elementary grades in order to see at what stage they achieve native-like proficiency in oral as well as written French.

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Table 1A

Sample Sizes for French Tests

Non-Integrated post-accueil group (NINT)	64
Integrated post-accueil group (INT)	18
Haitian group (HAI)	15
French control group (FC)	32

Table 1B

Participating Schools

NINT	INT	HAI	FC
Algonquin	Maisonneuve	Peace Centennial	Maisonneuve
Glencoe	Westminster		Westminster
Barclay			

Table 2

Sample Sizes for English Tests

Non-integrated post-accueil group (NINT)	45
Integrated post-accueil group (INT)	13
French control group (FC)	15

Table 3

Summary of Raven Matrices Test Scores[a]

NINT	23.46
INT	25.54
HAI	24.20
FC	23.16

F ratio: 0.78

df: 3,110

[a]maximum score is 36

Table 4

Summary of French and Mathematics Test Results[a]

	NINT	INT	HAI	FC	F ratio	df
(1) Test de lecture (20)[b]	10.13	12.80	12.93	12.64	4.14**	3,110
(2) Test de rendement en français						
Total (35)	18.49	23.92	27.33	23.40	17.98***	3,110
-Subtest I (5)	3.03	4.00	4.40	2.96	6.99***	3,110
-Subtest II (10)	3.97	6.85	6.67	7.36	36.11***	3,110
-Subtest III (3)	1.21	1.69	2.60	1.88	11.03***	3,110
-Subtest IV (3)	2.70	2.69	2.47	2.40	1.67	3,110
-Subtest V (3)	1.98	2.06	1.93	2.00	0.07	3,110
-Subtest VI (3)	1.90	1.85	2.67	1.72	2.86	3,110
-Subtest VII (3)	2.10	2.31	2.53	2.08	1.14	3,110
-Subtest VIII (5)	2.10	2.46	4.07	3.00	13.25***	3,110

Table 4 (cont'd)

Summary of French and Mathematics Test Results

	NINT	INT	HAI	FC	F ratio	df
(3) Test d'expression orale						
Global Evaluation						
-Pronunciation (5)	3.99	4.00	4.35	5.00	231.73**	3,88
-Grammar (5)	3.46	3.58	4.27	4.68	53.01***	3,88
-Vocabulary (5)	3.70	3.75	4.35	5.00	81.83***	3,88
-Communication (5)	3.50	3.38	3.92	4.58	22.11***	3,88
T-Unit Analysis						
-Total	35.00	28.00	34.62	26.83	2.56	3,85
-Mean length	6.59	6.83	7.62	7.61	4.24**	3,85
-Percentage correct[c]	(50) 1.74	(62) 1.81	(89) 2.47	(87) 2.40	23.58***	3,85

Table 4 (cont'd)

Summary of French and Mathematics Test Results

	NINT	INT	HAI	FC	F ratio	df
(4) Test de rendement en mathématiques (38)	23.44	27.20	24.93	23.60	1.81	3,112

*$p < 0.05$

**$p < 0.01$

***$p < 0.001$

[a]Mean scores joined by a solid line differ significantly from one another according to the Newman-Keuls Multiple Comparison Test.
Mean scores joined by a broken line do not differ significantly from one another.

[b]Maximum scores in parentheses.

[c]Statistical analysis based on transformed scores. Percent values indicated in parentheses were derived from the transformed scores.

Table 5

Summary of English Test Results[a]

	NINT	INT	FC	F ratio	df
(1) Listening Test (30)[b]	28.91	28.00	22.18	26.07***	2,70
(2) Reading Test (30)	27.36	25.27	16.91	16.75***	2,69
(3) Oral Production Test					
Item analysis					
-Correct responses	19.19	14.22	6.70	22.72***	2,65
-Incorrect responses					
- grammatically	5.74	6.78	6.90	0.13	2,65
- semantically	0.56	1.67	3.70	25.58***	2,65
- insuf. resp.	0.77	2.00	8.70	21.98***	2,65

Table 5 (cont'd)

Summary of English Test Results

	MINT	INT	FC	F ratio	df
(3) Oral Production Test (cont'd)					
Global Evaluation					
-Comprehension (5)	4.79	4.56	3.30	15.92***	2,65
-Pronunciation (5)	3.74	3.56	2.68	12.36***	2,65
-Grammar (5)	3.72	3.17	2.10	17.35***	2,65
-Vocabulary (5)	4.15	3.78	2.45	18.97***	2,65
-Communication (5)	4.59	4.06	2.70	22.50***	2,65

*p $<$ 0.05

**p $<$ 0.01

***p $<$ 0.001

[a]Mean scores joined by a solid line differ significantly from one another according to the Newman-Keuls Multiple Comparison Test.

[b]Maximum scores in parentheses